

# New Hampshire Environmental Disclosure Label

## January 2013

Electric providers are required by the New Hampshire Public Utilities Commission to provide customers with an environmental disclosure label with information to evaluate services offered by competitive suppliers and electric utilities, and to provide information about the environmental and public health impacts of electric generation. Further information can be obtained by calling your electric utility or competitive electric supplier, or by contacting the Public Utilities Commission. Additional information on disclosure labels is also available at <http://www.puc.nh.gov> or on your electric provider's website.

### Power Sources

(January 1, 2013 -December 31, 2013)

North American Power provided electricity to its customers within the New England power grid with the following resources:

	<u>North American Power's 25% Mix</u>	<u>PSNH's Mix*</u>	<u>New England Mix</u>
Biodiesel	0.0%	0.0%	0.0%
Biomass	1.3%	1.1%	2.0%
Coal	4.2%	30.0%	6.0%
Diesel	0.5%	0.0%	0.7%
Digester gas	0.0%	0.0%	0.0%
Efficient Resource (Maine)	0.4%	0.0%	0.4%
Fuel cell	0.0%	0.0%	0.0%
Hydroelectric/Hydropower	29.0%	12.0%	6.0%
Jet	0.0%	1.0%	0.0%
Landfill gas	0.4%	0.3%	0.5%
Municipal solid waste	0.8%	2.0%	1.1%
Natural Gas	30.0%	28.0%	40.0%
Nuclear	24.0%	19.0%	32.0%
Oil	4.0%	4.0%	6.0%
Solar Photovoltaic	0.3%	0.2%	0.3%
Trash-to-energy	2.0%	0.0%	2.0%
Wind	2.0%	1.1%	1.5%
Wood	1.1%	1.3%	1.5%
Energy Storage	0.0%	0.0%	0.0%
Total	100%	100%	100%

\* PSNH's mix reflects data for the 2012 calendar year.

### Air Emissions

(January 1, 2013 -December 31, 2013)

This table compares air emissions from North American Power's electricity mix to average emissions levels from all New England power sources:

	<u>North American Power's 25% Mix</u> (lbs/MWH)	<u>PSNH's Mix*</u> (lbs/MWH)	<u>New England Mix</u> (lbs/MWH)
Carbon Dioxide (CO <sub>2</sub> )	683.360	1,215.87	683.360
Nitrogen Oxide (NO <sub>x</sub> )	0.584	1.58	0.584
Sulfur Dioxide (SO <sub>2</sub> )	0.605	1.88	0.605

Notes: lbs/MWh = pounds per Megawatt-hour  
1Megawatt-hour = 1,000 kilowatt-hours

\* PSNH's mix reflects data for the 2012 calendar year.

### Additional Information and Notes:

**Power Sources** – The electricity you consume comes from the New England power grid, which receives power from a variety of power plants and transmits the power as needed to meet the requirements of all customers in New England. When you choose a power supplier, that supplier is responsible for generating and/or purchasing power that is added to the power grid in an amount equivalent to your electricity use. 'Known Resources' include resources that are owned by, or under contract to, the supplier. 'System Power' represents power purchased in the regional electricity market. Electric suppliers are required to obtain a certain amount of renewable energy in accordance with RSA 362-F, the state's renewable portfolio standard law. They may also choose to obtain amounts of renewable energy above their legal obligation, and utilities must also offer a renewable energy option to allow customers to choose to support the purchase of additional renewable energy by the utility.

### Emissions:

**Sulfur Dioxide (SO<sub>2</sub>)** is formed when fuels containing sulfur are burned, primarily coal and oil. Major health effects associated with SO<sub>2</sub> include asthma, respiratory illness and aggravation of existing cardiovascular disease. SO<sub>2</sub> combines with water and oxygen in the atmosphere to form acid rain, which raises the acid level of lakes and streams, and accelerates the decay of buildings and monuments.

**Nitrogen Oxides (NO<sub>x</sub>)** form when fossil fuels and biomass are burned at high temperatures. They contribute to acid rain and ground-level ozone (or smog), and may cause respiratory illness when there is frequent high level exposure. NO<sub>x</sub> also contribute to oxygen deprivation of lakes and coastal waters which is destructive to fish and other animal life.

**Carbon Dioxide (CO<sub>2</sub>)** is released when fossil fuels (e.g., coal, oil and natural gas) are burned. CO<sub>2</sub>, a greenhouse gas, is a major contributor to climate change.

For further information on the formation of ozone, its sources and its health effects, see:  
<http://des.nh.gov/organization/divisions/air/do/asab/ozone/categories/overview.htm>

If you have any questions regarding this disclosure label or need further explanation, please contact North American Power and Gas, LLC at 888-313-9086, [info@napower.com](mailto:info@napower.com) or visit [www.napower.com](http://www.napower.com)

